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520.43032X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ai SATOYAMA et al.

Application No.: 10/649,766

Filed: August 28, 2003

For: STORAGE SYSTEM

Group: 2182

Examiner: Not yet assigned

REQUEST FOR RECONSIDERATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 5, 2005

Sir:

In response to the Decision on Petition dated March 9, 2005, reconsideration and withdrawal of the Decision is respectfully requested in view of the following remarks.

REMARKS

Initially, in the Decision on Petition dated March 9, 2005, the Examiner asserts that the Petition to Make Special filed December 22, 2004 is defective for failing to include a complete detailed discussion of the most closely related references with the necessary specificity. Specifically, the Examiner asserts that the discussion of the references should be directed to how each of the independent claims is specifically distinguishable and patentable over the references provided. Applicants provide the following additional remarks.

The present invention as recited in the claims is directed to a storage system including a plurality of storage devices and a storage control unit for controlling the plurality of storage devices, the storage control unit including: a first interface for connection to a computer; a memory for storing a program which, when replicating data in the plurality of storage devices, is capable of selecting a destination volume considering the characteristics of the source volume; a CPU for executing the program; and a second interface for connection to the plurality of storage devices.

It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether considered alone or in combination, fail to disclose or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to disclose or suggest a memory for storing a program which, when replicating data in the plurality of storage devices, is capable of selecting a destination volume considering the characteristics of the source volume,

and/or selecting a destination volume considering the characteristics of source and candidate destination volumes, and/or referencing first and second sets of information in a memory in selecting a logical storage area into which the contents of a specified logical storage area constructed on a first or second group of storage devices are to be replicated, and/or referencing the information stored in the memory in selecting a destination volume for a specified volume constructed on the first or second group of storage devices, and/or checking, using the result obtained in the referencing, whether free volumes are available among the volumes constructed on a group of storage devices having the same interface as the first or second interface, and/or securing, if the checking has proved positive, an area, in the free volume found in the checking step, for creating a replication of the contents of the specified volume constructed on the first or second group of storage devices.

All of the independent claims recite at least one of these features or this feature, if there is only one. In particular, independent claim 1 recites a memory for storing a program which, when replicating data in the plurality of storage devices, is capable of selecting a destination volume considering the characteristics of the source volume. Independent claim 8 recites selecting a destination volume considering the characteristics of source and candidate destination volumes. Independent claim 13 recites referencing first and second sets of information in a memory in selecting a logical storage area into which the contents of a specified logical storage area constructed on a first or second group of storage devices are to be replicated, a means of checking whether free logical storage areas are available

on a group of storage devices having the same interface as the first or second interface, based on the results of referencing the first and second sets of information using the means of referencing, and a means of securing, in the free logical area found to be available using the means of checking such availability, an area for storing a replication of the contents of the specified logical storage area in the first or second group of storage devices. Independent claim 18 recites referencing the information stored in the memory in selecting a destination volume for a specified volume constructed on the first or second group of storage devices, checking, using the result obtained in the referencing, whether free volumes are available among the volumes constructed on a group of storage devices having the same interface as the first or second interface; and securing, if the checking has proved positive, an area, in the free volume found in the checking step, for creating a replication of the contents of the specified volume constructed on the first or second group of storage devices.

Therefore, since the references fail to disclose a memory for storing a program which, when replicating data in the plurality of storage devices, is capable of selecting a destination volume considering the characteristics of the source volume, and/or selecting a destination volume considering the characteristics of source and candidate destination volumes, and/or referencing first and second sets of information in a memory in selecting a logical storage area into which the contents of a specified logical storage area constructed on a first or second group of storage devices are to be replicated, and/or referencing the information stored in the memory

in selecting a destination volume for a specified volume constructed on the first or second group of storage devices, and/or checking, using the result obtained in the referencing, whether free volumes are available among the volumes constructed on a group of storage devices having the same interface as the first or second interface, and/or securing, if the checking has proved positive, an area, in the free volume found in the checking step, for creating a replication of the contents of the specified volume constructed on the first or second group of storage devices, it is submitted that all of the claims are patentable over the cited references.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger & Malur, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 520.43032X00).

Respectfully submitted,

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